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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,124	09/22/2003	Robert J. Tuttle		5410

7590 08/02/2007
Mac-Gray Corporation
404 Wyman Street
Waltham, MA 02451

EXAMINER

PATEL, RITA RAMESH

ART UNIT	PAPER NUMBER
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1746

MAIL DATE	DELIVERY MODE
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08/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,124

Applicant(s)

TUTTLE ET AL.

Examiner

Rita R. Patel

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendment filed on 12/11/06. Claims 1-36 are pending; claims 1, 23, and 35 have been amended. Applicant's arguments have been considered, but are not persuasive. Thus, claims 1-36 are finally rejected for the reasons of record.

The Office indicated in the prior Office Action that programmer 40 may operate with programmer 60 to provide automatic dispersion of supplies to individual washing machines at individual times, however, applicant contests this is inaccurate because programmer 60 is an alternate embodiment of programmer 40 and there is no indication of any combined functions; however, in arguendo, even if these embodiments of Blackburn's that are fully disclosed within a single application are not obvious for use together, the embodiment of programmer 60 still reads on applicant's claims for a programmer capable of controlling plural signals to plural washing machines. Programmer 60 is fully capable of providing plural outputs to respectively attached supply solenoids of washing machines and providing a duplication of washing machines is an obvious variant known in the art for providing many washing machines controlled by a central program, such as performed at Laundromats or community washing machine stations. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378 (CCPA 1960). Moreover, it is well settled that the intended use of a claimed

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apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963).

Secondly, applicant argues that Blackburn's obviation of a "coin operated machine" mechanism is deficient in reading on applicant's claim for a "payment processor"; however, the Office maintains that a "a coin operated machine" is a reasonable interpretation of applications claims for a "payment processor" as such coin operated machines are known to accept a deposit coin and process it in order to deliver washing functions, henceforth, the Office maintains its rejection.

In response to applicant's claims that there is no teaching of a distribution manifold according to claim 4, the Office finds that Blackburn teaches a pump 16 of head tank 19 which supplies fluid to a dispenser tank 24 and despite Blackburn's specific labeling of the conduit/delivery means between said pump 16, head tank 19, and tank 24, it is at once envisaged that these components are connected by way of a conduit, namely read on applicant's claims for a "distribution manifold". Conduits/manifolds are commonly used and known in the art for attaching components like these of washing machines to reduce/increase head pressure accordingly, and to create aesthetic construction of the machine such that it is compact for the purposes of delivery, storage, use, and for aesthetic appeal to the consumer, which may comprise of a concise rectangular shaped washing machine.

Applicant argues that the solenoids 20 of Blackburn fail to read on applicant's claims for a sensor, however, the solenoids 29 serve as means to actuate separate

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control means in response to an electrical signal from the supply means (col. 4, lines 39-41), and thus read on applicant's claims for a system of sensors to monitor flow continuity in the fluid distribution system; said solenoids detect fluid flow in response to a stimulus, being the supply. Sensors are commonly known in the art to be a device that receives and responds to a signal or stimulus; Blackburn's electrical solenoid is a device that performs these exact functions and thus reads on applicant's claim for a system of sensors. It would be obvious to one of ordinary skill in the art at the time of the invention to use substitution of known equivalent structures. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

Applicant further claims that the teaching of Blackburn and Pittendreigh fail to disclose or suggest a system that is capable of prompting the user to initiate the presentation of payment medium, selection of a washing machine, or selection a working fluid. However, as generally known in the art of payment driven washing machines, the washing machine will not operate until money/payment is deposited into the machine. Namely, Blackburn teaches a coin mechanism 60 and an indicator panel 62 which includes control switches and indicator lights. This reads on a user interface that prompts users to operate the machine by feeding it a payment medium. It is at once envisaged that indicator lights may flash or another equivalent type of indication such as an open coin slot or message on the indicator panel prompts the user to operate the machine correctly.

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In re applicant's claims that Blackburn, Pittendreigh, and Bruntz, fail in combination to teach monitoring the temperature of the working fluid, the following excerpt is provided from the prior Office Action (pg. 5) to address the obviation of monitoring the temperature of working fluid and thus reading on applicant's claims: Blackburn and Pittendreigh teach the claimed invention, except fail to teach specific temperature means for monitoring the temperature of the fluid therein the washing machines. However, it is well known in the art of such washing machines to optimize the temperature of the water therein, to optimally achieve best cleaning performances from the detergent and provide adequate and efficient water cleaning temperature depending on the type of load being washing therein, thus enhancing washing means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize and maintain specific temperatures therein since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The Office maintains its rejection over claims 1-36 respectively over Blackburn, Pittendreigh, and Bruntz as disclosed herein.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10-12, 14-27, 29-31, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn (US Patent No. 3,891,123) and further in view of Pittendreigh et al. herein referred to as "Pittendreigh" (US Patent No. 3,192,744).

Blackburn discloses a dispensing sequence that is controlled by output signals from programmer 60 to provide plural outputs (col. 2, lines 60-62; col. 3, lines 17-25). Thus, providing the apparatus of Blackburn with automatic dispersion of supplies to individual machines at individual times, in operation without dependence on each other (col. 3, lines 33-48). As seen in Figure 3, programmer 60 enables independent operation of a washing machine according to a desired washing sequence. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a multiplicity of washing machines and operate these machines with a single programmer 60; a duplication of washing machines is convenient for public use, for use in a washing/dry cleaning business, and in private community washing locations for washing many loads of laundry at one time and being able to monitor them all together. Laundromats are commonly known establishments in the art that provide multiple washing machines connected to a single programming function. It is well settled that the mere duplication of parts has no patentable significance unless a new and

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unexpected result is produced. *In re Harza*, 124 USPQ 378 (CCPA 1960). By having multiple washing machines, its more convenient to wash many loads at once.

Blackburn fails to specify details of the washing units 27 attached in the distribution washing assembly. Pittendreigh, however, teaches a laundry apparatus for treating articles therein, embodying specific operating and washing disclosures. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the invention and features of Pittendreigh to Blackburn to teach specific washing machine details in such a commercial washing system taught by Blackburn. First of all, Pittendreigh discloses that disposed on the front of the housing 10 of the washing machine is a coin slot control mechanism generally indicated at 60 and an indicator panel 62 which includes control switches and indicator lights (col. 3, lines 18-23). Upon deposit of the appropriate amount of money the coin mechanism 60 can be operated to close contacts 60-1 which are held in closed position by latch 76, thus completing a circuit to energize the motors 90, 112, 22 and perform selected cleaning functions. Therefore, by utilizing such payment processing features in Blackburn, the control signals and programmer of Blackburn may be used in direct operation with the payment processor. In Pittendreigh, control panel 62B allows the user to input washing controls, as well as view washing progression (Fig. 3). Moreover, a gang controller is taught by Blackburn for achieving monitoring of the individual washing machines. Blackburn discloses dispensing supply through the control of solenoid 29, which is effected by an electrical control circuit connected with a machine programmer 40 (col. 2,

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lines 50-52). Such a control system allows for group control of the plurality of washing machines 27.

Blackburn further discloses pump 16 for maintaining a liquid level in head tank 19 to thereby control the volume of supply held in the respective dispensing tanks 24, and finally dispense liquids to the individual washing machines, in operation with valve 25 and solenoid 29 (col. 2, lines 43-52). Solenoid sensors 29 and float actuated switch 21 read on components of applicant's claim for a system of flow sensors for monitoring the flow continuity of said fluid distribution system. The electrically driven pump 16 is actuated by float actuated switch 21 in the head tank 19 (col. 2, lines 24-26); thus switch 21 reads on applicant's claim for a first sensor in said distribution conduit downstream of said pump. Respective solenoid sensors 29 read on applicant's claim for a second flow sensor which is connected downstream a valve, specifically valve 25, for generating a second signal indicative of the flow of work therein. Blackburn discloses one set of distribution means, including a pump, a tank, a manifold, and a valve, however, it would have been obvious to one of ordinary skill in the art at the time of the invention to duplicate said distribution means for providing multiple means for delivering liquid solutions. It is well known in the art of cleaning for such washing machines that several different solutions such as liquid detergent, bleach, and/or fabric softener may be desirable for distribution into the washing machine at various point during the washing cycle. Therefore, by providing multiple distribution assemblies, multiple solutions may be incorporated into the washing functions to achieve desired cleaning.

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Blackburn and Pittendreigh teach the claimed invention, except fail to teach specific temperature means for monitoring the temperature of the fluid therein the washing machines. However, it is well known in the art of such washing machines to optimize the temperature of the water therein, to optimally achieve best cleaning performances from the detergent and provide adequate and efficient water cleaning temperature depending on the type of load being washing therein, thus enhancing washing means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize and maintain specific temperatures therein since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art: *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 8-9, 28, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn and Pittendreigh as applied to claims above, and further in view of Bruntz et al. herein referred to as "Bruntz" (US Patent No. 5,978,995).

Blackburn and Pittendreigh teach the claimed invention except fail to teach a temperature control system in the washing machine. However, Bruntz teaches a temperature control system for use in washing machine to control the temperature of wash and rinse water therein. The invention includes a temperature selection switch which operates the water valves for controlling the temperature of water entering the washing machine. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate said feature of Bruntz to Blackburn and Pittendreigh

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to allow user to select a temperature control and optimize temperature of the liquid washing solution therein to achieve aforementioned desired cleaning means.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn and Pittendreigh as applied to claims above, and further in view of Yamamoto et al. herein referred to as "Yamamoto" (US Patent No. 3,362,515). Blackburn and Pittendreigh teach the claimed invention, except fail to state disclose means for the payment processor to accept a stored-value payment card as payment. Instead Blackburn discloses means to accept coins for payment, however, one skilled in the art at the time of the invention may readily envisage card means for payment because it may be faster, more convenient and less complicated than requiring the user to obtain coins for operation. Card means are a known equivalence in the art of providing the same operational results for the user, but with aforementioned user benefits. It would be obvious to one of ordinary skill in the art at the time of the invention to use substitution of known equivalent structures. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). Moreover, Yamamoto teaches a card controlled apparatus for an apparatus wherein various kinds of services are rendered, such as washing or drying clothes (col. 1, lines 45-46). Such a card controlled feature may readily be incorporated into that of Blackburn and Pittendreigh for achieving said expected results.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

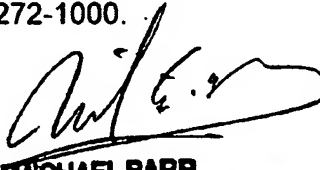
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



rrp



MICHAEL BARR
SUPERVISORY PATENT EXAMINER